

**Uniendo a Puerto Rico Fund  
Connect USVI Fund  
Stage 2 Fixed Support  
Application Form**

Estimated Time Per Response: 80 hours  
August 2020

Read the instructions thoroughly before completing this form. Failure to comply may cause your application for Stage 2 support to be disqualified.

1 Date Submitted: 09/03/2020			
<b>Applicant Information</b>			
2 Applicant Legal Classification			
<input type="radio"/> Consortium			
<input checked="" type="radio"/> Corporation			
<input type="radio"/> General Partnership			
<input type="radio"/> Government Entity			
<input type="radio"/> Individual			
<input type="radio"/> Limited Liability Company			
<input type="radio"/> Limited Liability Partnership			
<input type="radio"/> Limited Partnership			
<input type="radio"/> Trust			
<input type="radio"/> Unincorporated Association			
<input type="radio"/> Other: _____			
3 Entity Name Critical Hub Networks, Inc.			
4 FCC Registration Number (FRN) 0016087298			
5 Jurisdiction of Formation Puerto Rico, U.S.A.			
6 Address Line 1 652 Calle Hipodromo			
7 Address Line 2			
8 City San Juan	9 State PR	10 Zip Code 00909	
11 Phone (787) 728-9000 Ext.	12 Email cmarazzi@criticalhub.com		
<b>Contact Information</b>			
13 Name Karen E Larson			
14 Organization Critical Hub Networks, Inc.			
15 Address Line 1 652 Calle Hipodromo			
16 Address Line 2			
17 City San Juan	18 State PR	19 Zip Code 00909	
20 Phone (787) 728-9796 Ext.	21 Email kmarazzi@criticalhub.com		
<b>Agreements</b>			
If the applicant has entered into one or more agreements relating to the applicant's application, identify each agreement relating to the participation of the applicant in the competitive proposal process by providing an identifying name for each agreement, the name of each party to the agreement, and the type of agreement. Attach a separate exhibit that briefly describes all disclosed agreements.			
22 Agreements			
Agreement Identifier	Agreement Type		Name of Party
None			




<p><b>27 Financial Qualifications and Project Funding Documentation</b></p> <p>In an attachment to this application form, describe how the required construction will be funded, including financial projections that demonstrate the applicant's ability to cover the necessary debt service payments over the life of a loan, if any. An applicant may choose to submit unaudited or audited financial statements from the prior fiscal year to support its application.</p>
<p><b>28 Network Plan, Technology Description and System Design Documentation</b></p> <p><input checked="" type="checkbox"/> <b>Initial Overview.</b> In an attachment to this application form, provide at a high level how the applicant will meet its Stage 2 public interest obligations for the relevant performance tier and latency combination(s) using Stage 2 support, for example, building a new network, expanding an existing network, or deploying new or existing technology.</p> <p><input checked="" type="checkbox"/> <b>Detailed Description.</b> In an attachment to this form, describe how the technology and system design the applicant intends to use will deliver voice and broadband service, including a network diagram which must be certified by a professional engineer. The professional engineer must certify that the network is capable of delivering, to 100 percent of the locations in each minimum geographic area, voice and broadband service that meets the requisite performance requirements. See 47 C.F.R. § 54.309.</p> <p><input type="checkbox"/> Entities proposing to use wireless technologies also must provide a description of their spectrum access in the areas for which they seek support and demonstrate that they have the required licenses to use that spectrum, if applicable.</p>
<p><b>29 Price and Minimum Performance Requirements</b></p> <p>The applicant must provide the relevant information in Schedule B to this application form related to the performance levels of its broadband service offerings for each minimum geographic area the applicant proposes to serve. The applicant must also provide in Schedule B the minimum download and upload speed, usage allowance, and latency performance for the service offerings proposed for each minimum geographic area.</p>
<p><b>30 Disaster Preparation and Response Plan</b></p> <p>The applicant is required to submit with its application a Disaster Preparation and Response Plan (DPRP) which will be reviewed for completeness. The DPRP must address in detail and provide a description how an applicant intends to prepare for and will respond to disasters in Puerto Rico and/or the U.S. Virgin Islands according to five criteria: (1) Strengthening Infrastructure; (2) Ensuring Network Diversity; (3) Ensuring Backup Power; (4) Network Monitoring; and (5) Emergency Preparedness.</p>
<p><b>31 Letter of Credit Commitment Letter</b></p> <p>The applicant must submit a letter from a bank acceptable to the Commission, as set forth in section 54.1508, committing to issue an irrevocable stand-by letter of credit, in the required form, to the applicant. The letter must, at a minimum, provide the dollar amount of the letter of credit and the issuing bank's agreement to follow the terms and conditions of the Commission's model letter of credit in Appendix B of the <i>PR-USVI Stage 2 Order</i>.</p>

## Certifications

By signing below, the authorized officer certifies the following statements:

1. that the applicant is in compliance with all applicable statutory and regulatory requirements for receiving Stage 2 fixed support for the Uniendo a Puerto Rico Fund or the Connect USVI Fund.
2. that the applicant or its parent company, if the applicant is a wholly owned subsidiary, has filed a FCC Form 477 as required during the relevant time period for June 30, 2018; December 31, 2018; June 30, 2019; or December 31, 2019.
3. that the applicant is financially and technically qualified to meet the public interest obligations of Section 54.1507 of Title 47 of the Code of Federal Regulations (47 C.F.R. § 54.1507) for each relevant performance tier and latency combination and in each geographic area for which it seeks support.
4. that the applicant will meet the relevant public interest obligations, including the requirement that it will offer service at rates that are equal to or lower than the Commission's reasonable comparability benchmarks for fixed wireline services offered in urban areas.
5. that the applicant will have available funds for all project costs that exceed the amount of Stage 2 fixed support authorized by the Commission to be received for the first two years of its support term.
6. that high-cost support will not be used for costs that are or will be reimbursed by other sources of support, including federal or local government aid or insurance reimbursements; and that support was not used for other purposes, such as the retirement of company debt unrelated to eligible expenditures.
7. that the applicant provided service in the territory as of June 30, 2018.
8. that the applicant acknowledges that it must be designated as an Eligible Telecommunications Carrier pursuant to section 214(e) of Title 47 of the United States Code (47 U.S.C. § 214(e)) in the area(s) in which it will receive support prior to being authorized to receive such support.
9. that the description of spectrum access in areas for which the applicant will seek support provided in this application in the Stage 2 competitive process is correct and the applicant will retain such access for at least ten (10) years after the date on which it is authorized to receive support.
10. that the applicant is in compliance with prohibited communications rules adopted by the Commission.
11. that the applicant and any party to the application are not subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988.
12. that the applicant has sole responsibility for investigating and evaluating all technical, marketplace, and regulatory factors that may have a bearing on the level of Uniendo a Puerto Rico Fund or Connect USVI Fund Stage 2 Fixed high-cost support it submits in its application, and that, if the applicant wins support, it will be able to build and operate facilities in accordance with the Uniendo a Puerto Rico Fund or Connect USVI Fund Stage 2 obligations and the Commission's rules generally.

**I, the individual identified as the applicant's certifying representative below, am authorized to make these certifications on behalf of the applicant and declare under penalty of perjury that, based on all the information available to the applicant, all the information provided in or with this application, including the certification statements above, are true and correct.**

32 Signature 	33 Date Sep 3, 2020
34 Printed Name of Authorized Officer Carlo Marazzi	
35 Title/Position of Authorized Officer President	
36 Phone 787-728-9000 Ext.	36 Email cmarazzi@criticalhub.com
38 Employer Critical Hub Networks, Inc.	

Persons willfully making false statements on this form can be punished by fine or forfeiture under the Communications Act, 47 U.S.C. Secs. 502, 503(b), or fine or imprisonment under Title 18 of the United States Code, 18 U.S.C. Sec. 1001.

**FCC NOTICE FOR INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT**

Part 3 of the Commission's Rules authorize the FCC to request the information on this form. The purpose of the information is to determine whether applicants can meet the terms and conditions of Uniendo a Puerto Rico Fund and Connect USVI Fund Stage 2 fixed support. The information will be used by the Universal Service Administrative Company and/or the staff of the Federal Communications Commission, to evaluate this form, to provide information for enforcement and rulemaking proceedings and to maintain a current inventory of applicants. No authorization for support can be granted unless all information requested is provided. Failure to provide all requested information will delay the processing of the application or result in the application being returned without action. Information requested by this form may be made available for public inspection after the Commission staff completes its review. However, consistent with the Commission's limited information procedures in place for the Uniendo a Puerto Rico Fund and the Connect USVI Fund, certain information may be withheld from routine public inspection even after support is authorized. If a request for public inspection under the Commission's rules is made for an applicant's information, the applicant will be notified and then must justify the continued confidential treatment of the information if it objects to the disclosure.

The public reporting for this collection of information is estimated to average 80 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Act Project (3060-1274), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to [pra@fcc.gov](mailto:pra@fcc.gov). PLEASE DO NOT SEND YOUR RESPONSE TO THIS ADDRESS.

Remember - You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-1274.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, PUBLIC LAW 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3) AND THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

**Critical Hub Networks - Uniendo a Puerto Rico Fund Stage 2 Fixed Support Application**  
**FCC Form 5634 Part 26:**  
**ETC Designation**

Critical Hub received ETC Designation on October 2, 2018 from the Puerto Rico Telecommunications Regulatory Bureau (JRT-ETC-0024) for the municipalities of San Juan, Guaynabo, and Bayamón (see attached).

On July 15, 2020 Critical Hub has submitted its biennial re-designation review to PRTRB and notified the PRTRB of Critical Hub's expansion to the municipalities of Carolina and Trujillo Alto.

Critical Hub has not notified the PRTRB of its expansion into the municipalities included within its Stage 2 Fixed Support application. However, Critical Hub will notify the PRTRB and obtain ETC designation for those municipalities within 60 days after public notice of selection to receive fixed support.

Attached is the English Version of our ETC Designation Order, certified by the Secretary of PRTRB as a true and exact translation.

**CONFIDENTIAL**

CHN Form 5634 Part 26: ETC Designation

**COMMONWEALTH OF PUERTO RICO  
PUERTO RICO TELECOMMUNICATIONS  
BUREAU**

**CRITICAL HUB NETWORKS, INC.**

CASE: JRT-2018-SU-0003

**Petitioner**

MATTER: PETITION FOR  
DESIGNATION

**ADMINISTRATIVE ORDER**

On September 6, 2018, Critical Hub Networks, Inc. (Petitioner) filed a Petition for Designation (Petition) before the Telecommunications Bureau (NET) requesting its designation as an Eligible Telecommunications Company (ETC).

**Background:**

The Petitioner is a telecommunications company certified to operate in Puerto Rico, through an Administrative Order dated May 20, 2010, case number JRT-CERT-0243. In its motion dated September 6, 2018, the Petitioner expressed his interest in being designated as Eligible Telecommunications Company (ETC) to provide "...broadband access service under the Guaranteed Access Service [term used in Spanish for the Lifeline program], known as LifeLine ", in the municipalities of San Juan, Guaynabo and Bayamón. Concurrently with the Petition, the Petitioner submitted a Sworn Statement and its Expansion and Improvements Plan (Plan) for the next five (5) years, which illustrates its intention to expand his services to Carolina and Caguas municipalities. In addition, the Petitioner stated its willingness to offer services in other municipalities, as long as he receives the federal funds to cover the construction costs of the outside plant.

In the *Resolution and Order*, dated September 21, 2018 and notified on September 24, we put on hold the designation of the Petitioner as ETC, until he submitted to us, within the term of five (5) days, the additional information requested. Specifically, we request the ETC, pursuant to Section 54.202 (a)(4) of the FCC Rules, to submitted evidence that demonstrates their financial and technical capacity to provide the Lifeline service, also to submit an audited financial statement for the year 2017, in order to evaluate its financial capacity to provide services and carry out its responsibilities as an ETC. In addition, pursuant to Section 54.202 (a) (2) of the FCC rules, which require that ETCs demonstrate their ability to remain operational in emergency situations, the NET required the Petitioner to file - additionally to the certification already included in the *Petition* stating its ability to stay operational in emergency situations - the details regarding the type of emergency back-up systems (batteries, generators, etc.) and the duration of the same (hours) that its facilities have.

On October 1, 2018, the Petitioner filed a *Motion in Compliance with Resolution and Order*, attaching a copy of the audited financial statements for the fiscal year 2016-2017 and informed it was still working with the audited financial statements for the fiscal year 2017-2018 were still in process. In addition, as ordered, the Petitioner submitted the back-up systems details of his facilities.

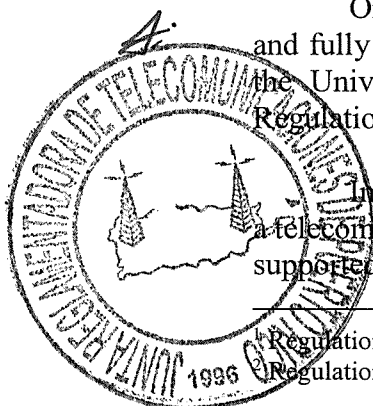
**Discussion:**

Once designated as an ETC company, the Petitioner is obliged to comply continuously and fully with comply with all pertinent regulations and, specifically, with the provisions of the Universal Service Regulation<sup>1</sup>, as amended by the Transitory Amendments to the Regulation on Universal Service<sup>2</sup> (Regulation).

In accordance with section 9.2 of Regulation 7795 regarding eligibility requirements, a telecommunications company wishing to be designated as an ETC must (1) Offer all services supported by the Universal Service program throughout Puerto Rico, using its own facilities

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<sup>1</sup>Regulation No. 7795  
<sup>2</sup>Regulation No. 8093



or a combination of its own facilities and the resale of the services of another telecommunications company; (2) Advertise the availability of such services and the rates, through one or more newspapers of general circulation; and (3) Participate in the Board's optional programs or services for Puerto Rico which are paid by the Puerto Rico Universal Service (Program). If the ETC cannot offer its services throughout Puerto Rico, the Board may, prior request for and as an exception, approved the same for certain specific municipalities.

In addition to the requirements set forth in Section 9.2 of Regulation 7795, Section 9.3 requires an ETC to comply with Section 54.202 of the Federal Regulation Code, 47 CFR §54.202.

The NET, as part of its official duties, resolves to designate the Petitioner as an ETC, for the municipalities of San Juan, Guaynabo and Bayamón. Once the Petitioner, expand its services to other municipalities, the Petitioner must notify it to the Board.

**Order:**

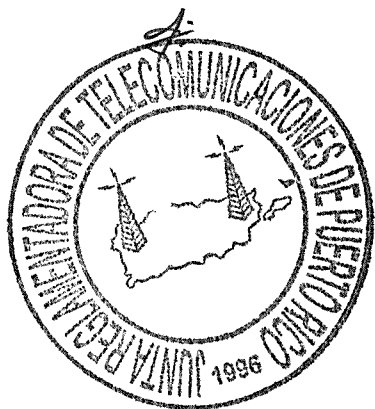
In accordance with the NET's broad jurisdiction over all telecommunications services, over all persons rendering these services within the Commonwealth of Puerto Rico, and over any person with a direct or indirect interest in said services or company, the NET RESOLVES AND ORDER;

***Regarding to the Petition requesting to be designated as ETC:  
GRANTED***

***Critical Hub Networks, Inc. is designated to receive funds from Federal Universal Service Fund, as an Eligible Telecommunications Company (ETC) to exclusively provide Lifeline services in Puerto Rico, under the number JRT-ETC-0024.***

***Pursuant to Section 9.8.1, Critical Hub Networks, Inc., must submit its biennial re-designation review, on April 1, 2020.***

***Once Critical Hub Networks, Inc. expands its services to other municipalities the Petitioner must notify the Board of it.***



Provided that any party adversely affected by the following Resolution and Order may file a motion for reconsideration before the Secretary Division of the Puerto Rico Telecommunications Bureau ("NET"), within the term of twenty (20) days from the date of the filing of the notice of this order. The petitioner party shall send a copy of such motion, by mail, to the parties in this case.

The NET shall consider the motion for reconsideration within fifteen (15) days of its filing. Should it reject it forthright or fail to act upon it within said fifteen (15) days, the thirty (30) day term to request administrative or judicial review shall re start from the date of notice of such denial, or from the expiration of the fifteen (15) day term. If a determination is made in its consideration, the term to petition for judicial review shall re start from the date a copy of the notice of the order or resolution of the NET definitely resolving the motion, is filed in the record of the case. Such order or resolution shall be issued and filed in the record of the case within ninety (90) days after the motion to reconsider has been filed. If the NET accepts the motion to reconsider, but fails to take any action with respect to such motion within ninety (90) days of its filing, it shall lose jurisdiction on it, and the term to file administrative and judicial review before the Public Service Regulatory Board or the Appeals Court will begin upon the expiration of said ninety (90) day term, unless the NET, for just cause and within those ninety (90) days, extends the term to resolve the reconsideration for an additional period that shall not exceed thirty (30) additional days.

Notwithstanding, the NET may accept or make a determination with respect to a timely filed motion for reconsideration, even after fifteen (15) days of its filing, as long as the term to seek administrative and judicial review has not elapsed and a petition for such review has not been filed. The NET may also reconsider, by its own initiative, the instant Resolution and



Order, as long as the term to seek administrative and judicial review has not elapsed and a petition for such review has not been filed.

If the party adversely affected by the present order or final resolution chooses not to file for reconsideration, in accordance with the provisions of Section 4.2 of the Uniform Administrative Procedure Act of the Government of Puerto Rico (Law 38-2017), may submit a petition for review before the Public Service Regulatory Board or to the Court of Appeals of Puerto Rico, within a term of thirty (30) days, from the date in which a copy of the Net's final resolution or order notification is archived. The party shall notify the filing of the petition for review to the NET and all other the parties within the term to request the petition. The notification may be made by mail. Provided, that, if the date in which the copy of the Net's final resolution or order notification is archived is different from the notice is mailed, the term of thirty (30) days to request administrative or judicial review shall be calculated from the date the notice is mailed.

NOTIFY this RESOLUTION AND ORDER to the Petitioner, through its legal representative, Omar E. Martínez Vázquez, Esq., PMB 37 Calle Calaf 400, San Juan PR 00918.

So, the Bureau approved on October 5<sup>th</sup>, 2018.

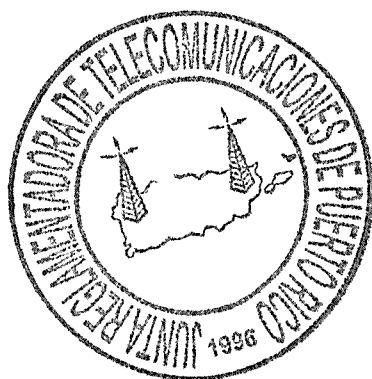
#### CERTIFICATE OF AUTHENTICITY

I hereby CERTIFICATE that the foregoing document is a true and exact translation of the Order approved by the Bureau on October 5<sup>th</sup>, 2018. I further CERTIFY that today, April 4<sup>th</sup>, 2019, I mailed and emailed copy of the Order to the parties of record, and I have proceeded to file the instant order.

In witness, whereof, I sign the present translation in San Juan, Puerto Rico, on April 4<sup>th</sup>, 2019.



MARCUS R. TORRES SKERRETT  
Secretary of the Bureau



## **Critical Hub Networks - Uniendo a Puerto Rico Fund Stage 2 Fixed Support Application FCC Form 5634 Part 28:**

### **Network Plan, Technology Description & System Design Documentation**

#### **Initial Overview**

Critical Hub Networks (CHN) is a leader in fiber-based broadband technology services in Puerto Rico. CHN will use Stage 2 support funding to expand its existing Fiber-to-the-Premise (FTTP) PON network, bringing CHN's Optico Fiber gigabit broadband and voice services to new municipalities in Puerto Rico. CHN's network is 100% fiber optic. All Stage 2 supported locations will have access to broadband service with Gigabit speeds and low latency, as well as access to voice services.

CHN launched its flagship fiber-based broadband services, known as Optico Fiber, in June 2014 in limited areas within San Juan, Puerto Rico. Today, Optico Fiber is available in large portions of San Juan, Bayamon, Carolina, Guaynabo and Trujillo Alto. Optico Fiber customers are among the most satisfied broadband users on the island and enjoy unparalleled speed and reliability.

Hurricane Maria and the Coronavirus pandemic have increased the urgency of bringing fast, reliable broadband services to all residents of Puerto Rico. Reducing telecommunication service reliance on the electric grid is essential to improving reliability and facilitating rapid restoration following service-interrupting events such as earthquakes and hurricanes. Reduced power requirements for Passive Optical Network (PON) technology allow CHN to nearly eliminate all reliance on the electric grid. Solar Photovoltaic Systems installed at each access node combined with backup generators for sunless days allows current Optico Fiber customers to maintain their broadband service during an electric grid outage as long as the customer can provide a power source for the network box ("ONT") through a generator or a battery backup. CHN will continue to use solar power in all Stage 2 Funded access nodes.

CHN's FTTP distribution network utilizes PON technology over a Cascaded Splitter Point-to-Multipoint topology. Dual fiber optic cables to the distribution access node through physically diverse paths offer redundancy at the first splitter level.

Investment in CHN's network is futureproof. Gigabit speed and latency tiers will be achieved immediately using GPON, with the ability for future deployment of XGSPON and NGPON2 in parallel with GPON services.

Access nodes will be interconnected with 10Gbps to 100Gbps links of fiber through physically diverse paths when feasible and upgraded as needed to maintain the speed and latency tiers supported by Stage 2 funds. Subsea backhaul fiber interconnections between Puerto Rico and Internet Exchange Points (IXPs) in the continental U.S. will also be upgraded as needed to maintain the speed and latency tiers.